FOCUSED SITE INSPECTION PRIORITIZATION
SITE EVALUATION REPORT

METRO DISPOSAL SYSTEMS, INC.
COLLINSVILLE ROAD
FAIRMONT CITY, ILLINOIS

CERCLIS ID No.: ILD980607204

Prepared for

U.S. ENVIRONMENTAL PROTECTION AGENCY
Site Assessment Section
77 West Jackson Boulevard
Chicago, IL 60604

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TABLE OF CONTENTS

LIST OF FIGURES

1. INTRODUCTION

The Ecology and Environment, Inc. (E & E), Technical Assistance Team (TAT) was assigned by the United States Environmental Protection Agency (U.S. EPA) under Contract No. 68-W0-0037, Technical Direction Document (TDD) T05-9503-210 to evaluate the Metro Disposal Systems, Inc. site located in Fairmont City, St. Clair County, Illinois. E & E performed Focused Site Inspection Prioritization (FSIP) activities for the site to determine whether, or to what extent the site poses a threat to human health and the environment. This FSIP report presents the results of E & E's evaluation and summarizes site conditions and targets pertinent to the migration and exposure pathways associated with the site. Background information was obtained from a Screening Site Inspection (SSI) report (E & E 1991), a Site Inspection (SI) report (United States Environmental Protection Agency [U.S. EPA] 1991), and an E & E site reconnaissance performed on July 19, 1995 (E & E 1995).

This report is organized into six sections, including this introduction. Section 2 describes the site and provides a brief site history. Section 3 provides information about previous investigations conducted at the site. Section 4 provides information about the four migration and exposure pathways (groundwater migration, surface water migration, soil exposure, and air migration). Section 5 is a report summary. References used in the preparation of this report are listed in Section 6.

2. SITE DESCRIPTION AND HISTORY

2.1 SITE DESCRIPTION

The Metro Disposal Systems, Inc. (Metro) site is located at the intersection of Route 203 and Collinsville Road (Route 40), Fairmont City, St. Clair County, Illinois (SW1/4SW1/4 Sec. 8, T.2 North, R.9 West). The coordinates of the site are latitude 38°38'26" North and longitude 090°07'15" West. It is currently an inactive landfill located on the edge of an urban area in Fairmont City, Illinois, south of the intersection of Route 203 and Collinsville Road. The property is bordered on the west by low-lying wetlands, and on the east by an earthen berm and Schoenberger Creek. Conrail railroad tracks border the site to the south. A residential area of Fairmont City is located south of the site across the railroad tracks. The north border of the site is formed by Collinsville Road (E & E 1991). North of Collinsville Road is an abandoned gas station, an abandoned motel, and a mobile home community. The site is located within the city of Fairmont City, Illinois, which has a population of 2,139 (U.S. Bureau of the Census 1992). The site location is shown on Figure 2-1.

The Metro site property is situated on approximately 18 acres of land. The western portion of the property is the location of the landfill site, which is approximately 8.5 acres in size. The eastern portion of the property is a natural wetland area which is approximately 7 acres in size. The landfill is currently inactive, but is currently covered with demolition debris, tires and other general refuse (E & E 1995). The site's features are shown in Figure 2-2. Schoenberger Creek, located adjacent to the east side of the site property, is the nearest surface water body. This creek flows north through a culvert beneath Collinsville Road. It is unknown exactly where this creek ends, however, it is unlikely that the creek perennially flows into Cahokia Creek or any other water bodies north of the site. Old Cahokia Creek is located about 0.5 miles north/northeast of the property. This creek flows northeast to

Horseshoe Lake, a state-designated fishery and recreational area. The Mississippi River, a state-designated fishery, is 2.5 miles west of the site (Illinois Department of Conservation [IDEC] 1991). The topography of the area that the landfill is situated on is relatively flat. Regional groundwater flow direction under the site is assumed to be toward the west/southwest, which is in the direction of the Mississippi River (E & E 1991).

Access to the site from all directions is unrestricted. Primary access to the site is from Collinsville road via a dirt access road that extends south through the center of the fill area. At the time of the E & E TAT 1995 site reconnaissance visit, this access road was overgrown with thick vegetation. The site was not fenced and no security measures to prevent trespassing were observed on site (E & E 1995).

E & E FIT performed a site reconnaissance and sampling of the Metro site on May 8, 1991. E & E FIT observed that a drainage ditch extends between Collinsville Road and the north side of the landfill area. This ditch flows west, turns south at the northwest corner of the fill area, and extends along the western border of the site. The ditch appears to terminate near the southwest corner of the fill area. A pipe located underneath the landfill allows the water in the drainage ditch to flow underneath the landfill (Child 1972). The ditch reappears on the eastern side of the fill area and then empties into the wetland on the eastern portion of the site. Another drainage ditch is located along the eastern edge of the site west of the earthen berm that forms the eastern boundary of the site. The drainage ditch continues through a culvert beneath the bridge on Collinsville Road and empties into Schoenberger Creek approximately 500 feet northeast of the site (E & E 1991).

Currently, the landfill area is characterized by its mounded appearance and uneven topography. The fill area was generally well vegetated, although few areas of stressed vegetation and bare soil existed. The eastern edge of the fill slopes sharply eastward toward the low-lying wetland that cover the eastern half of the site. This wetland area was filled with standing water and thick vegetation (E & E 1991).

E & E TAT performed a site reconnaissance of the Metro site on July 19, 1995. Photographs taken during the site reconnaissance are presented in Appendix A. The physical features of the site were described as follows: The site is accessible via a dirt road that runs south off Collinsville road. No fencing or other security measures to prevent trespassing were present. The property contained the landfill on the western side of the property, and a natural wetland on the eastern side. No monitoring wells were observed because of vegetative

overgrowth on the landfill (Sirhan 1995). West of the landfill site was another wetland that was located off site approximately 0.11 miles (see Appendix A, photograph 1). The elevation of the landfill is higher than both wetlands.

No surface water control measures were observed on site. Surface water was observed flowing east toward the wetland area. The landfill was flooded with rainwater, and leachate was observed flowing from the fill area to the wetland (E & E 1995).

The railroad that composes the southern border of the site is at a higher elevation than the landfill. The railroad, therefore, serves as a barrier to surface water runoff off-site (E & E 1995).

The site was littered with municipal waste and demolition debris (see Appendix A, photographs 2 through 4) . The soil was stained dark black, and paint sludges and paint containers were observed on the ground. At the time of the reconnaissance, a man was observed dumping refuse on the site. The site was covered with trash and debris, and vegetation around the edges of the landfill was sparse (E & E 1995). In the southwest part of the site, an area where old tires and sludge wastes were burned in the past was observed (see Appendix A, photographs 5 through 8). Mounds of black sludge-like material were observed along the eastern part of the fill area (E & E 1995). A residential mobile home community was observed north of the site across Collinsville Road. All other residential areas were observed to be approximately 0.5 miles west of the site (E & E 1995). The soil on the north side of the road was grayish.

2.2 SITE HISTORY

Disposal of wastes at the Metro site began on August 24, 1970, under a permit issued by the Illinois Department of Public Health (IDPH) to Metro Disposal Systems, Inc. (Mensing 1991). Metro was issued a permit by IDPH to landfill only the approximately 8.5 acres on the western side of the property. Owners and operations at the site prior to the site's use as a landfill in 1970 are not known.

During its operation as a landfill, the site received 20 compactor loads containing 40 cubic yards each of solid wastes and refuse from East St. Louis six days a week (Ballard 1970). The number of transporters of wastes to the landfill, the depth of the trenching operation, and the existence of a liner beneath the landfill area are not known. In January 1972, the Metro site was denied a permit by the IEPA Department of Land Pollution Control

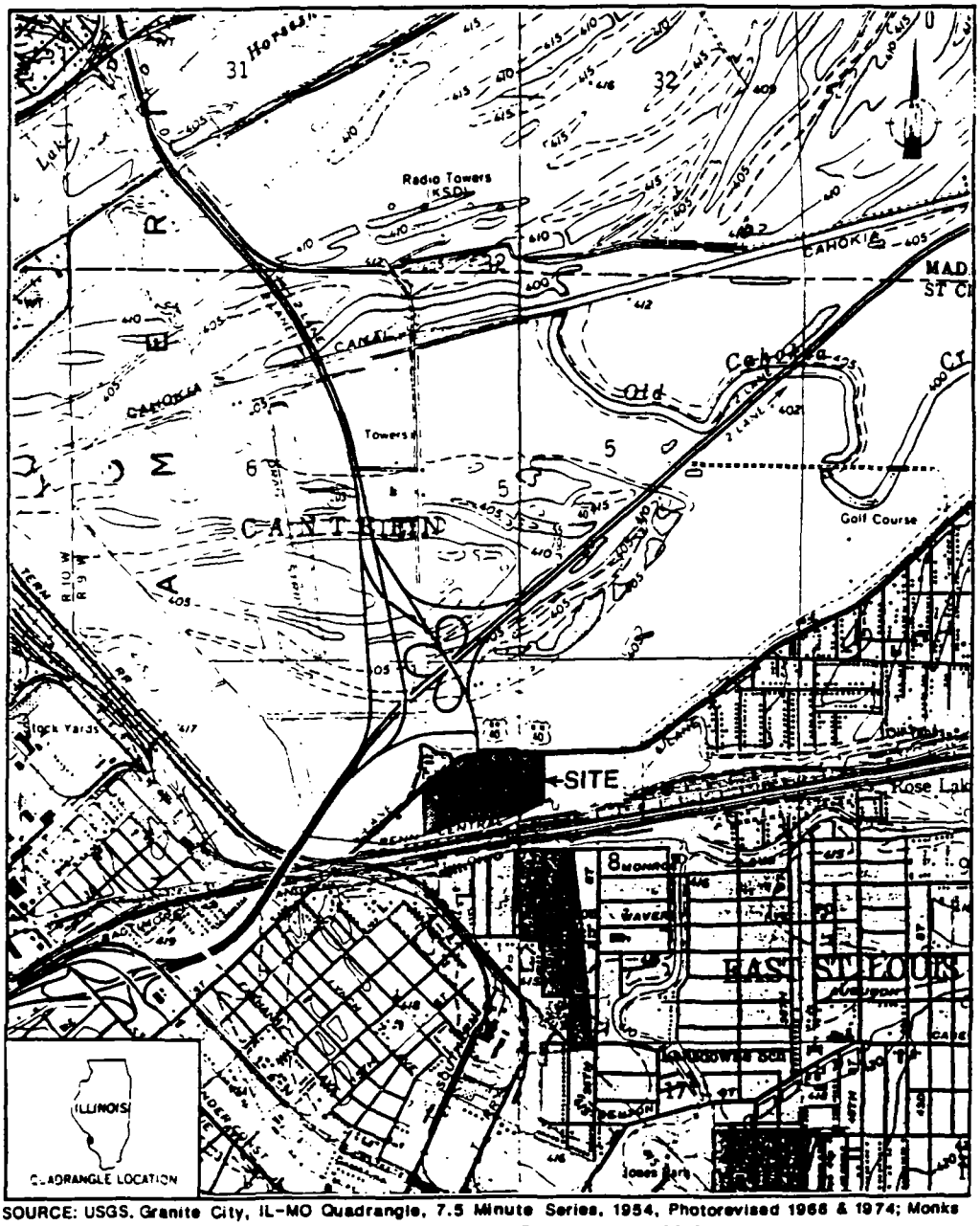
(IEPA-DLPC). According to a 1981 U.S EPA report, IEPA-DLPC inspected the Metro site on February 1, 1972, and observed a large hole in the landfill. A large drainage tile was located at the bottom of this hole. Metro intended to backfill this hole and close the site. No additional information concerning this issue was found in the site file.

IEPA issued an enforcement case with the Illinois Pollution Control Board (IPCB) against Metro on February 9, 1973, for violations of the Illinois Environmental Protection Act including: failure to provide daily cover for refuse, failure to provide final cover of filled areas, disposal of liquids or hazardous substance at the site, exceeding height limits for landfill, allowing leachate to flow off site into public waterways, and operating portions of the landfill without a permit (IPCB 1973). IPCB issued an opinion and order on June 7, 1973, to revoke the permit held by Metro to operate and landfill at the site. The order stipulated that Metro would close the site and apply final cover within 90 days from the date of the order and pay a $2,500 penalty to the state of Illinois for violations of the Illinois Environmental Protection Act. Metro ceased to accept wastes at the site in approximately summer 1973 and completed closure activities at the site in approximately mid-1974 (Mensing 1991).

A Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Section 103(c) Notification of Hazardous Waste Site form, submitted by Anheuser-Busch, Inc., to U.S. EPA on June 9, 1981, indicates that Anheuser-Busch had generated and transported caustic label pulp, a corrosive, to the Metro landfill located in Fairmont City. Anheuser-Busch's 103(c) notification indicated that an additional 487,000 cubic feet of caustic label pulp wastes was shipped directly to the Metro site by Anheuser-Busch between March 1973 and June 1980 (U.S. EPA 1981). Routine inspections performed by IEPA after 1974 did not indicate any evidence of illegal dumping (Mann and Mensing 1978; McCarthy 1977), however, as stated earlier, a person was observed dumping refuse on site (E & E 1995).

The Metro site is currently owned by Consolidated Rail Corporation (Conrail). Conrail has owned the site since approximately 1978 (Pendergast and Warwick 1991). According to the St. Clair County Tax Assessor's Office, Conrail leased the site to Metro for used as a sanitary landfill (Smith 1991).

There are currently no known ongoing regulatory or enforcement actions being taken by IEPA in regard to the Metro site. No remedial activity concerning the Metro site has been documented in the past (E & E 1991).



SOURCE: USGS. Granite City, IL-MO Quadrangle, 7.5 Minute Series, 1954, Photorevised 1968 & 1974; Monks Mound, IL Quadrangle, 7.5 Minute Series, 1954, Photorevised 1968 & 1974.

SCALE
0 ½ 1 MILE

Quadrangle Location

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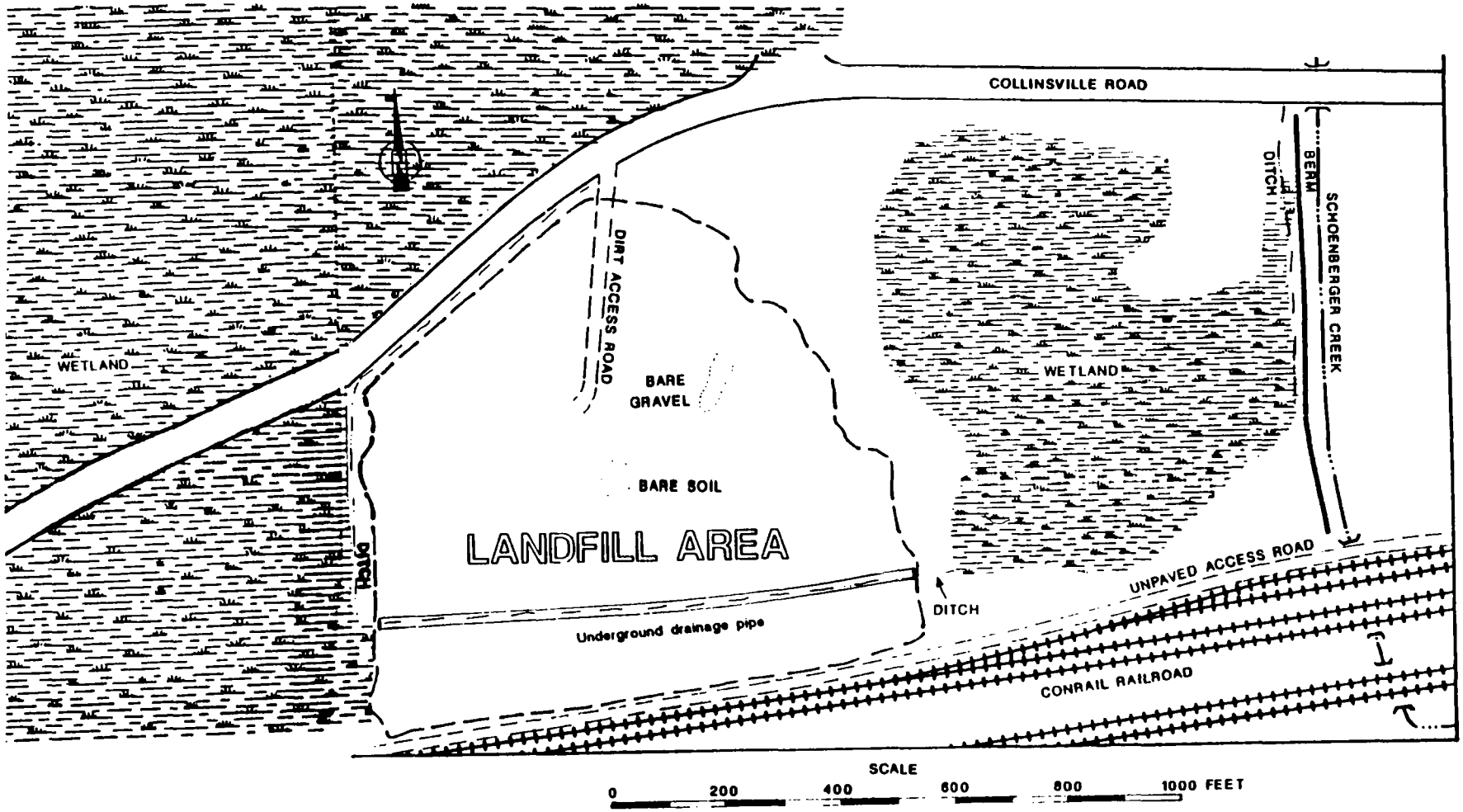
TITLE	Site Location Map	FIGURE # 2-1
SITE	Metro Disposal Systems, Inc.	TDD# T05-9503-210
CITY	Fairmont City STATE Illinois	SCALE 1:24,000
SOURCE	United States Geological Survey Monks Mound, Illinois, 7.5 Minute Series	DATE 1974
		REVISED



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TITLE: Site Features Map	FIGURE #: 2-2
SITE: Metro Disposal Systems, Inc.	TDD#: T05-9503-210
CITY: Fairmont City STATE: Illinois	SCALE: Not to scale
SOURCE: Ecology and Environment, Inc.	DATE: 1991
	REVISED: ----

3. PREVIOUS INVESTIGATIONS

The Metro site was initially discovered in 1970, when Metro Disposal Systems, Inc. (Metro), submitted an application to the IEPA for a permit to use the site as a landfill. During a routine inspection of the Metro site conducted by IEPA on July 21 and 22, 1971, yellow paint-like liquid, paper pulp, scum, and washing liquid were observed in standing water at the site. The IEPA inspectors documented that leachate was flowing into an on-site drainage ditch that eventually flowed into the Mississippi River (IPCB 1973). Similar observations were made by IEPA during routine inspections of the site in December 1971 and in May, July, and December 1972 (E & E 1991). As stated in Section 2, IEPA entered a joint enforcement case with IPCB against Metro in 1973 for violations of the Illinois Environmental Protection Act. Metro then ceased accepting wastes in the Summer of 1973 and completed closure activities in mid-1974 (Mensing 1991).

During a routine inspection of the Metro site on February 8, 1977, IEPA observed that the western slope of the site was burning beneath the surface, affecting an area of approximately 375 square yards. The fire was extinguished on February 14, 1977, by the Conrail Engineering Department, from Indianapolis, Indiana, which used heavy equipment to extinguish the fire and recovered refuse that had been exposed by the operation (McCarthy 1977). The cause of the fire is not known (Mensing 1991).

Metro installed eight groundwater monitoring wells at the site sometime after closure was completed. The date that these wells were installed is unknown. As part of post-closure under the Illinois Environmental Protection Act, Metro was required to sample these monitoring wells. It is not known whether this sampling was conducted. On June 7, 1978, IEPA completed the installation of three additional groundwater monitoring wells and two leachate monitoring wells at the site and began a one-year sampling program (Nienkerk 1978).

A second incident of a fire burning beneath the site was discovered by IEPA personnel on August 29, 1978. IEPA observed that the surface vegetation atop the fill area had been burned, and that a fire was burning beneath the ground surface. IEPA could not determine the origin of the fire. Conrail was notified of the fire on August 29, 1978, and subsequently used a private contractor to excavate, extinguish the fire, and cover the site by November 17, 1978 (Mann and Mensing 1978).

IEPA collected samples from groundwater monitoring wells and leachate monitoring wells in November 1979. Analysis of the groundwater monitoring well samples revealed heavy metals, including barium at 0.5 milligrams per liter (mg/L), arsenic at 0.035 mg/L, and manganese at 5.5 mg/L. Polychlorinated biphenyls (PCBs) were detected at 0.6 micrograms per liter (μg/L) (IEPA-DLPC 1979). Results of leachate monitoring well samples for the same sampling period revealed organic compounds including dieldrin at 0.95 μg/L, heptachlor epoxide at 0.2 μg/L, and PCBs and 19 μg/L. The available information and analysis for the leachate monitoring wells did not contain information concerning detection of heavy metals.

Further sampling of on-site leachate monitoring wells for PCBs was conducted by IEPA on April 29, 1982. Analysis of these samples revealed PCBs at 1.2 mg/L. Analysis of samples collected from groundwater monitoring wells revealed PCBs at levels below 0.1 μg/L. An upgradient groundwater monitoring well sample (location not documented) was collected during this sampling effort. Levels of PCBs detected in this upgradient well were similar to those detected in downgradient and sidegradient samples (IEPA-DLPC 1982).

IEPA and E & E FIT performed site inspections of the Metro site on May 8 and 9, 1991. E & E FIT collected two leachate samples, one leachate well duplicate sample, and eight soil/sediment samples. Seven of the soil/sediment samples were collected from on-site locations, and one sample was collected off site. Five soil samples were collected from the landfill area, and three sediment samples were collected from the drainage ditches on site (see Appendix B, Figure 2-3).

Sediment samples S1 and S2 were both collected from the drainage ditch located along the west edge of the berm on the east side of the site. The analytical results for these samples indicated detectable concentrations of acetone (120 μg/kg), carbon disulfide (5 μg/kg), and toluene (2 μg/kg) in sample S1. Methylene chloride and acetone were detected in sample S2 at concentrations of 150 μg/kg and 52 μg/kg, respectively. Mercury and zinc were detected at elevated concentrations (0.46 mg/kg and 622 mg/kg, respectively) when

compared to background soil sample S8 (see Table 4-1 in Appendix B). Soil sample S3 was collected from an area of bare soil in the center of the fill area. Organic contaminants detected in this sample included acetone (30 μg/kg), carbon disulfide dieldrin (44 μg/kg) with the exception of mercury, which was detected at a concentration of 0.20 mg/kg, no inorganic analytes were identified at concentrations exceeding background in this sample. Soil samples S4 and S5 were collected from locations at the eastern edge of the fill area, adjacent to the on-site low-lying wetlands. No organic compounds were detected in sample S4. However, sample S5 contained chlorobenzene at a concentration of 2,500 μg/kg, toluene at 4 μg/kg, and benzene at 7 μg/kg. This sample also contained elevated concentrations of cadmium, copper, and zinc. Sample S5 was located on the eastern side of the fill area between the fill area and the wetland. Soil sample S6 was collected to determine if contaminants were migrating from the fill area into the drainage ditch which flows between the site and the adjacent property to the west. The analytical results for sample S6 indicated the presence of chlorobenzene (100 μg/kg), toluene (4 μg/kg), carbon disulfide (6 μg/kg), and acetone (350 μg/kg). Sediment sample S7 was collected from the northwestern corner of the site in the drainage ditch located along the northern edge of the fill area. Two semivolatile organic compounds, fluoranthene and pyrene, were detected in this sample at concentrations of 1,200 μg/kg and 970 μg/kg, respectively. In addition, 2-butanone (430 μg/kg), acetone (1,100 μg/kg), and methylene chloride (680 μg/kg) were identified in S7. Soil sample S8 was collected from an area that appeared to be undisturbed, and therefore served as the background sample for the site (E & E 1991). Analytical data and sample locations can be found in Appendix B.

Five on-site monitoring wells (MW1 through MW5) were sampled by E & E FIT in 1991. One monitoring well pair was located in the southeast corner of the site as observed by E & E FIT. Another pair was located in the northeast corner of the site. The fifth monitoring well was located approximately 100 feet from the edge of the fill area in the wetlands. Supposedly, there were another 6 wells identified in the past by IEPA, but these wells were not discovered by E & E FIT in 1991. Monitoring well data revealed the following contamination in the groundwater samples: benzene at 10 μg/L, chlorobenzene at 120 μg/L, antimony at 15.1 μg/L, arsenic at 73.4 μg/L, and iron at 39,200 μg/L (E & E 1991). Sample locations and analytical data can be found in Appendix B.

Leachate well samples LW1 and LW2 were collected by E & E FIT from on-site leachate monitoring wells located near the southwest and northeast corner of the fill area,

respectively. Leachate well LW1 was located approximately 100 feet north of the railroad tracks in the southwest corner of the fill area. Leachate well LW2 was located approximately 400 feet south of Collinsville Road in the northeast corner of the fill area. A duplicate sample was collected from leachate well LW1. Leachate well LW2 was re-sampled due to sampling errors in the collection of sample LW2 for TCL compounds, therefore sample LW2A was collected at the location of sample LW2 and submitted to the laboratory for TCL compound analysis. Leachate well data revealed the following contamination in submitted samples: methylene chloride at 12,000 μg/L, 2-butanone at 4,100 μg/L, benzene at 6,500 μg/L, toluene at 1,800 μg/L, antimony at 31.8 μg/L, arsenic at 16.5 μg/L, and iron at 67,500 μg/L (E & E 1991). Sample locations and analytical data can be found in Appendix B.

The IEPA 1990 PA report stated that the landfill had no liner, no barriers to prevent surface water runoff or leachate seepage.

E & E TAT performed a site reconnaissance of the site on July 27, 1995, to obtain current information on the status and conditions of the site. Site photographs can be found in Appendix A. A site description is found in Section 2.

4. MIGRATION AND EXPOSURE PATHWAYS

This section describes the four migration and exposure pathways associated with the Metro site. Section 4.1 discusses the groundwater migration pathway; Section 4.2 discusses the surface water migration pathway; Section 4.3 discusses the soil exposure pathway; and Section 4.4 discusses the air migration pathway.

4.1 GROUNDWATER MIGRATION PATHWAY

This section discusses regional geology and soils, groundwater releases, and targets associated with the groundwater migration pathway at the site.

4.1.1 Geology and Soils

The area surrounding the Metro site is located on top of unconsolidated valley fill and valley train materials ranging in thickness from 50 to 120 feet (Schicht 1965). The valley fill material is composed of alluvial deposits (sands, gravels, and clays) that overlie the older valley train deposits (outwash sands and gravels from glacial meltwater), which range in thickness from 30 to 40 feet (Schicht 1965). The bedrock underlying the unconsolidated valley fill and valley train deposits consists of the Mississippian-age Lower Chesterian Series. Limestones, sandstones, and shales make up the series, which ranges in thickness form 100 to 300 feet (Student *et al.* 1981).

Area well logs indicate that local wells are screened primarily in sand and gravel units in the unconsolidated deposits at a relatively shallow depths. Other wells in the vicinity of the site, however, are completed at depths ranging from 30 to 116.5 feet, and are generally used for irrigation, industry, and drinking water (E & E 1990). Fill and valley train deposits are hydraulically connected to the bedrock; therefore, the aquifer under investigation includes

both the unconsolidated valley fill and valley train deposits as well as the Lower Chesterian bedrock series. According to area well logs, the depth to the unconsolidated deposits is approximately six feet. According to the IEPA September 25, 1991 SI report, depth to the aquifer under investigation is approximately 11 feet below ground surface (BGS). The regional groundwater flow is west and the local flow is east and west. The size of the local flow area was not identified in the report. The aquifer is recharged via rain and water percolation from surface soils. The IEPA 1991 SI report also states there is a discharge of groundwater to the wetlands on the eastern portion of the site (IEPA 1991).

4.1.2 Groundwater Releases

A release of hazardous substances from the Metro site to groundwater is documented based on the results of previous investigations. The landfill is inactive and believed to be unlined, and monitoring well sample analytical results documented contaminants from the landfill that are present in the groundwater beneath the site. No information regarding the depth of the monitoring wells was provided in the state file. Antimony, arsenic, and benzene were detected in monitoring samples at levels which exceed U.S. EPA Maximum Contaminant Levels [MCLs] (U.S. EPA 1994). Chlorobenzene was also detected in monitoring well samples at 120 μg/L. The MCL level documented in the Federal Register is 0.1 mg/L (Federal Register 1991).

Since the aquifer underlying the site is so shallow (11 feet BGS), a groundwater to surface water pathway may exist such that groundwater to surface water discharge of contaminants from the landfill to the wetlands may occur. The existence of this potential pathway has been documented in an IEPA 1991 SI report. Flooding and large rainfall events may increase the rate of contaminant percolation through surface soils to the groundwater table underneath the site.

4.1.3 Targets

No engineered containment system exists underneath the Metro landfill (U.S. EPA 1991). The landfill is no longer active, but since the landfill is unlined, contaminants could be leaching downward through the soil profile to the groundwater table. The wetlands east of the landfill on site and the off-site wetlands west of the landfill may be subject to contamination via groundwater to surface water migration. Therefore, plant and animal

species that may have the tendency to live or utilize the wetlands east and west of the landfill may be subject to contaminant exposure.

Approximately 300,000 persons within a 4-mile radius of the site obtain drinking water from the Illinois-American Water Company, which draws its water from two intakes in the Mississippi River located approximately 2.75 miles upstream from the site (Buck 1995). Approximately 1,797 persons are served by the Mound Public Water Supply (PWS), which draws its drinking water from one groundwater well located within the town of State Park, Illinois, located approximately 4.25 miles northeast of the site (USGS 1974; Carsellus 1995; Mound PWS 1995).

Outside of the Illinois-American Water Company water supply area and the Mound PWS service boundaries, there are approximately 734 persons who obtain drinking water from private wells within a 4-mile radius of the site, and are therefore potential targets for groundwater contamination (E & E 1990).

There are also approximately 400 acres of farmland within a 4-mile radius of the site that are irrigated with groundwater (Hardiman 1989).

4.2 SURFACE WATER MIGRATION PATHWAY

A release to surface water is documented based on past and current site conditions. Three sediment samples were collected along various drainage ditches during the E & E FIT 1991 SSI. Sediment samples S1 and S2 were collected from the drainage ditch located along the west edge of the earthen berm on the east side of the site. Sediment sample S7 was collected from the northwestern corner of the site in the drainage ditch located along the northern edge of the fill area. Sample S1 contained acetone at 120 micrograms per liter (μg/kg), carbon disulfide at 5 μg/kg, toluene at 2 μg/kg, and arsenic at 5.1 milligrams per kilogram (mg/kg). Sample S2 contained methylene chloride at 150 μg/kg, acetone at 52 μg/kg, arsenic at 8.3 mg/kg, and mercury at 0.46 mg/kg. Sample S7 contained methylene chloride at 680 μg/kg, acetone at 1,100 μg/kg, 2-butanone at 430 μg/kg, fluoranthene at 1,200 μg/kg, pyrene at 970 μg/kg, and arsenic at 5.2 mg/kg (see Appendix B for sample locations and analytical data). Whether the contaminants encountered in these sediment samples migrated off site has not been confirmed, however, the site slopes steeply toward the wetlands that are located west and east of the site. The presence of these contaminants in the

east wetland area on site suggests that these contaminants may have migrated from the landfill to the wetland.

The wetlands within a 1-mile radius of the site are prone to flooding (Allen 1995). The on-site wetland located east of the landfill was filled with water at the time of the E & E TAT 1995 site reconnaissance (E & E 1995). Because of the potential of this wetland to flood and inundate local areas, it is likely that contaminants at the Metro site could migrate off site into surrounding wetlands.

The Audubon Avenue Heron Colony located at the intersection of 26th Street and Audubon Avenue, and the Fairmont City Site located west of Fairmont City and south of Old Cahokia Creek are 2 natural areas listed in the Illinois Natural Heritage Database. These potentially sensitive areas are within a 4-mile radius of the site. Rose Lake is about 1.5 miles southeast of the site. See Appendix C for a listing of threatened and endangered species that live within St. Clair County (IEPA 1994).

4.3 SOIL EXPOSURE PATHWAY

A release of hazardous substances from the Metro site to surrounding soils is likely based on past and current site conditions. On-site surface soil samples S5 and S6 contained chlorobenzene at 2,500 μg/kg and 100 μg/kg, respectively. The current on-site dumping incidences that occur on site also contribute to soil contamination at the landfill.

According to the E & E TAT 1995 SSI, the Metro site is completely accessible to the public; approximately 6,505 persons live within 1 mile (straight-line-distance) from the site (IEPA 1991). The site is not restricted by any fencing and/or security measures, and the site is located in a densely populated area along one of the major routes from East St. Louis to Fairmont City (Collinsville Road). There is evidence of past trespassing on site, because empty beer and alcohol containers were observed during the E & E TAT 1995 site reconnaissance. Though the landfill is closed, the fact that contaminants were detected in site soils could present a potential threat to trespassers via dermal contact and incidental ingestion of site contaminants. These contaminants may also migrate off site to surrounding residential areas because of the potential for the site to flood. Wetland plant and animal species are also at risk to exposure via ingestion of wetland/landfill surface waters and soils, inhalation of volatiles, and dermal contact with wetland/landfill soils and sediment.

4.4 AIR MIGRATION PATHWAY

A release of hazardous substances to air is possible based on past and current site conditions. The landfill is closed and, for the most part, is covered with gravel vegetation refuse and other debris. However, a burn area with exposed soil was observed in the northeast portion of the site during the 1995 E & E TAT reconnaissance (E & E 1995). At the time of the reconnaissance, it appeared that burning of waste/debris continues to occur at the site. Such burning may allow for the release of contaminants detected in site soils, or contaminants in the material being burned.

There have been no complaints of odors to regulatory agencies in the past or present, but it is likely that trespassers could be exposed via inhalation to any lingering, volatile organic compounds (VOCs) present on site.

5. SUMMARY

The Metro site has been inactive as a landfill since 1974. Since 1974, however, it has been documented that wastes/debris have been dumped on site until as recently as the TAT reconnaissance in 1995. All site sample analytical data document the presence of contamination in on-site soils and sediments, and in groundwater. It is likely that contamination migrates off site to the adjacent wetlands because the wetlands within a 1-mile radius of the site are prone to flooding (Allen 1995). E & E TAT observed flooding of the on-site wetland during the E & E TAT 1995 reconnaissance visit.

A release to groundwater is documented, based on the presence of antimony, arsenic and benzene encountered in on-site monitoring wells and PCBs encountered in on-site leachate monitoring wells as presented in an IEPA 1979 report. The population that utilizes private wells within a 4-mile radius of the site is small, and public groundwater is obtained from two intakes along the Mississippi River. Approximately 300,000 persons within a 4-mile radius of the site obtain drinking water from the Illinois American Water Company, which obtains surface water from these two intakes. One of the intakes is located approximately 2.75 miles due west of the site. The other intake is approximately 14 miles northwest of the site. The Mounds Public Water System obtains water from a well located in State Park, Illinois. The well is approximately 4.25 miles northeast of the site. On-site monitoring well samples contained antimony, arsenic and benzene at concentrations greater than U.S. EPA MCLs.

A release of groundwater to surface water is possible because the aquifer underlying the Metro landfill is shallow (approximately 11 feet below ground surface). It was reported that groundwater discharges into the on-site wetland east of the site (IEPA 1991). Local groundwater flow directions underneath the site are contingent upon the height of the

groundwater table within the mound of the landfill, and the amount and rate of water percolation to the groundwater.

A release of contaminants to surface water is likely based on current and past site conditions. Flooding events may allow site contaminants migrate off site. Signs of site flooding was observed during the E & E TAT 1995 reconnaissance visit. Also, because the aquifer under investigation underlying the site is shallow, there is the potential that contaminants from the landfill can migrate from groundwater to surface water and discharge into the on-site wetland east of the landfill and the off-site wetland west of the landfill. IEPA reported that there is a groundwater to surface water discharge of contaminants from the landfill to the eastern on-site wetlands.

The Audubon Avenue Heron Colony, the Fairmont City Site, and Rose Lake are 3 natural areas within a 4-mile radius of the Metro site. These sensitive terrestrial areas are located greater than 2 miles from the site. Land barriers such as roads and residential areas may prevent on-site contamination from migrating from the Metro site to those areas. Horseshoe Lake, located approximately 3.5 miles northwest of the site is fed by Old Cahokia Creek which is located approximately 2 miles north of the site. Contaminant migration off site via surface water pathways or other routes of exposure are dependent on their environmental persistence and direct on-site to off-site routes of exposure which do not exist at the Metro site. Threatened and endangered species live within St. Clair County and may be exposed to contaminants that may have migrated to wetlands east and west of the landfill. See Appendix C for a listing of threatened and endangered species in St. Clair County (IEPA 1994). These species could be exposed via dermal contact, inhalation of potential air contaminants, and ingestion of surface water or soils/sediments.

A release of contaminants to on-site soils was documented in E & E FIT surface soil samples taken in 1991. There are no site access restrictions at the landfill, therefore, humans that reside within 0.25 miles of the site may be impacted by on-site contaminants via dermal soil exposure and incidental soil ingestion. Trespassers could also be exposed to on-site contaminants via dermal soil exposure and incidental soil ingestion. It is unknown whether there are any workers on site.

A release of hazardous substance to air is possible. There is no past or current documentation or an air release of on-site contaminants in the environment that may affect the wetlands or surrounding residential areas, however, there is documentation of the burning of

refuse and tires at the landfill. Also, volatile organic compounds (VOCs) detected in on-site soils could also be a potential air contaminant source.

6. REFERENCES

References not included in Appendix D: documents that are currently available within U.S. EPA files; copyrighted documents that are currently available in E & E's library; maps produced by either the United States Geological Survey or the Illinois State Geological Survey; and documents that are created by the various state agencies for public use.

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APPENDIX A

1995 SITE RECONNAISSANCE PHOTOGRAPHS

Photo: 1

Direction: West

Time: 15:09

Date: July 19, 1995

Description:

Wetland west of the Metro site.

Photo: 2

Direction:

Time: 15:09

Date: July 19, 1995

Description:

Junked material on-site.

Photo: 3

Direction:

Time: 15:09

Date: July 19, 1995

Description:

Junked material on-site.

Photo: 4

Direction:

Time: 15:09

Date: July 19, 1995

Description:

Junked material on-site.

Photo: 5

Direction: Southwest

Time: 14:53

Date: July 19, 1995

Description:

Burn area.

Photo: 6

Direction: Southwest

Time: 14:53

Date: July 19, 1995

Description:

Burn area

Photo: 7

Direction: Southwest

Time: 14:53

Date: July 19, 1995

Description:

Burn area.

Photo: 8

Direction: Southwest

Time: 14:57

Date: July 19, 1995

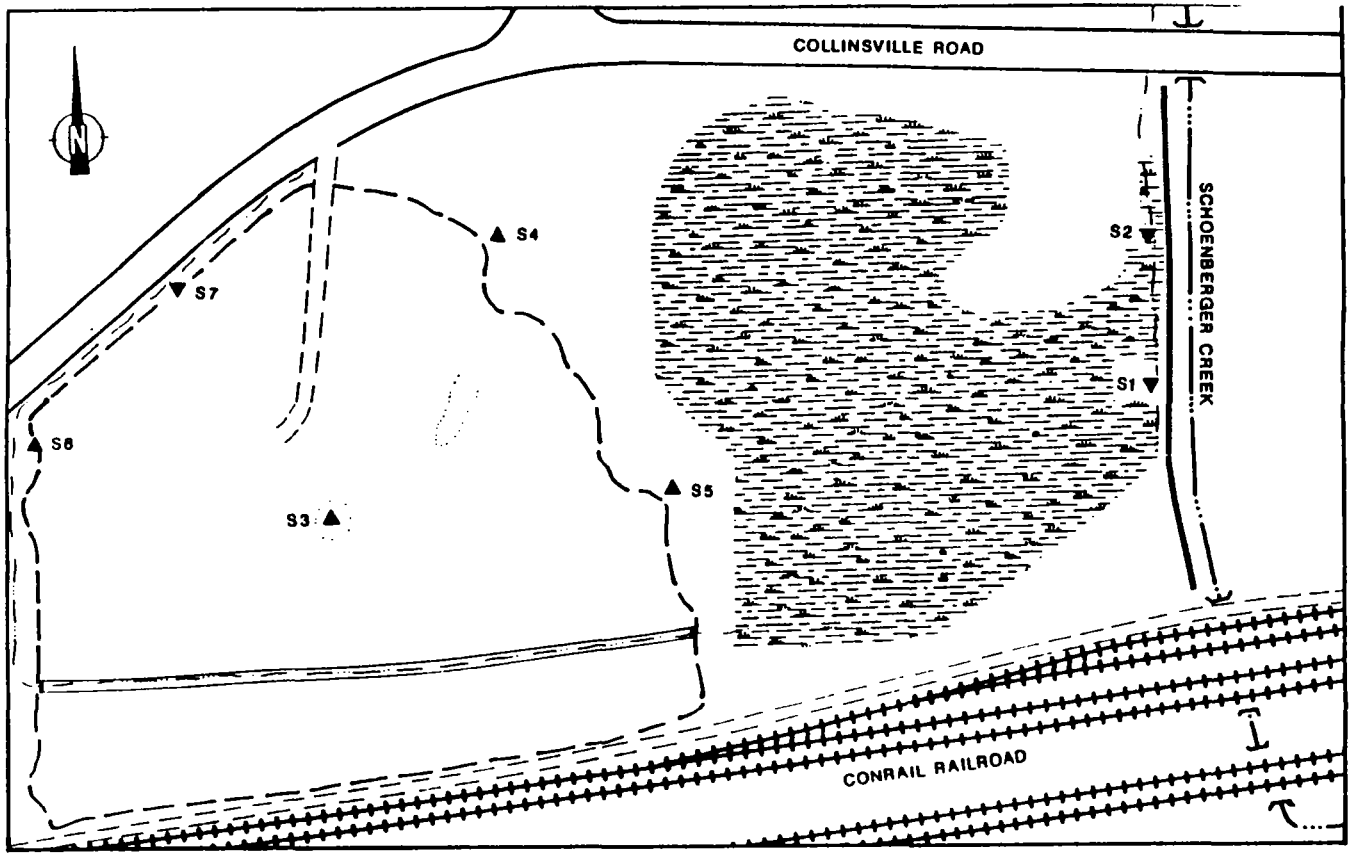
Description:

Burn area

APPENDIX B

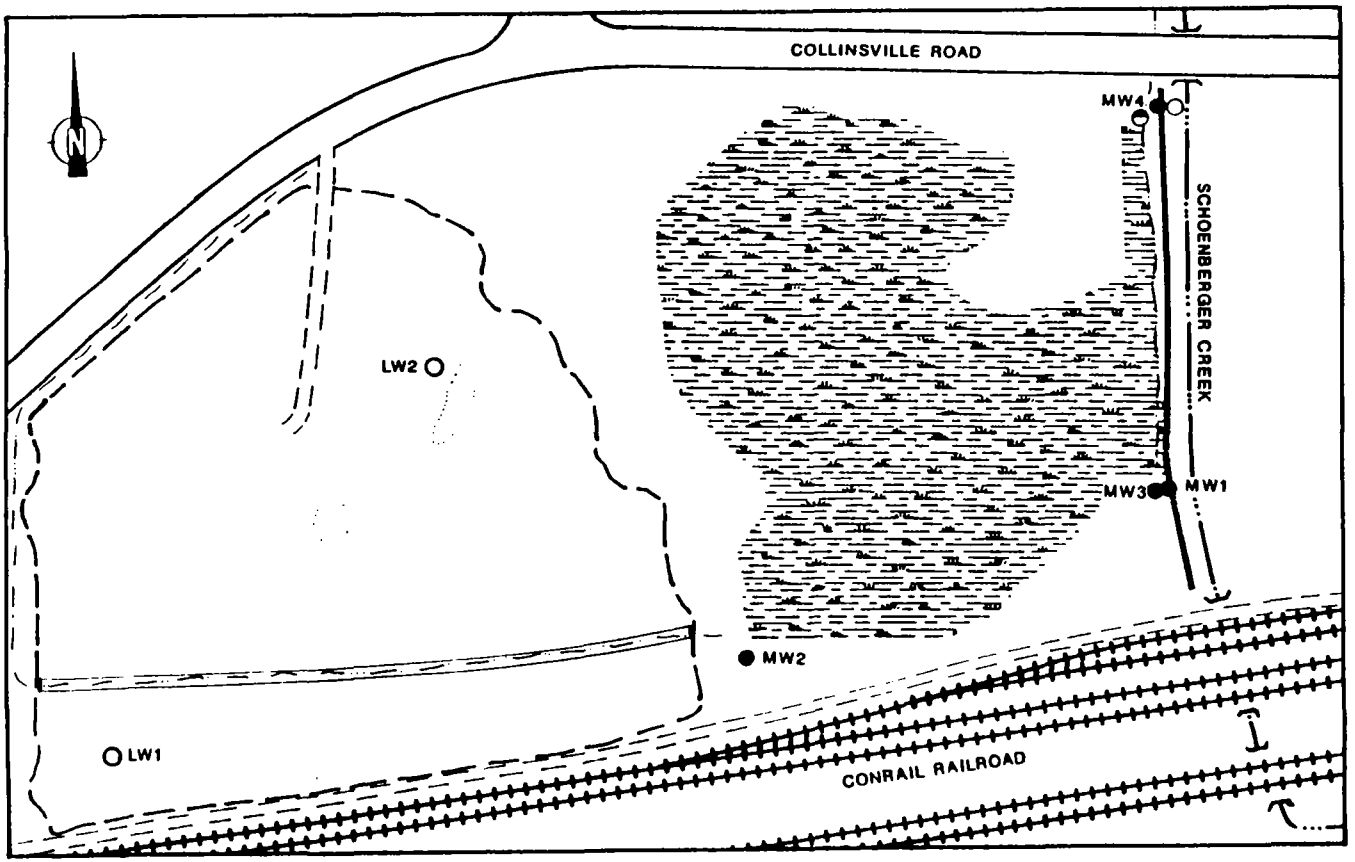
1991 SCREENING SITE INVESTIGATION SOIL/SEDIMENT SAMPLING LOCATIONS, MONITORING WELL AND LEACHATE WELL SAMPLING LOCATIONS AND ANALYTICAL RESULTS

SAMPLING PERFORMED ON MAY 8, 1991 BY E & E FIT

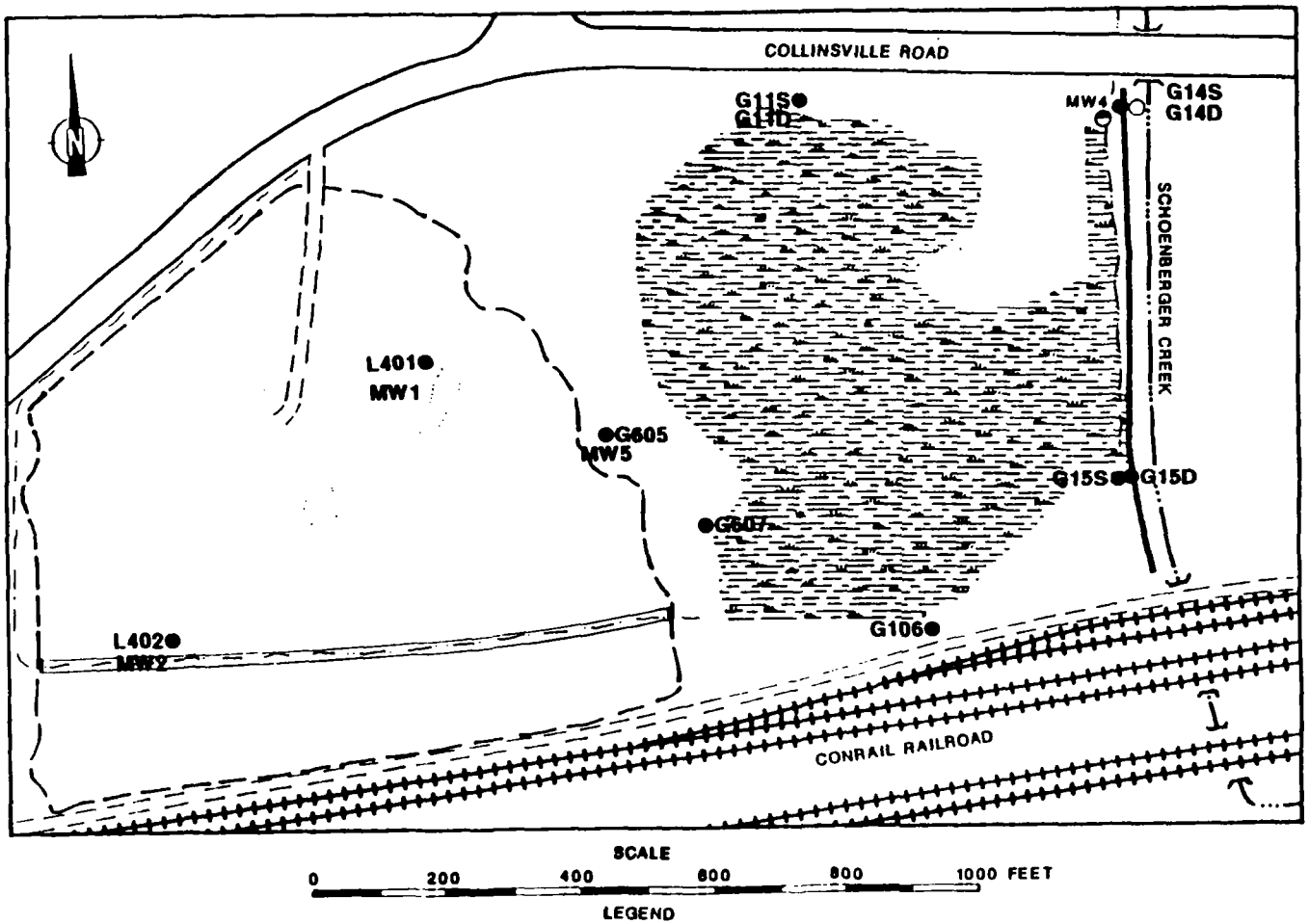


ecology and environment, inc.
Technical Assistance Team
Region V

TITLE: Soil/Sediment Location Map	FIGURE #: 2-3
SITE: Metro Disposal Systems, Inc.	TDD#: T05-9503-210
CITY: Fairmont City STATE: Illinois	SCALE: Not to scale
SOURCE: Ecology and Environment, Inc.	DATE: 1991 REVISED: 1995



ecology and environment, inc. Technical Assistance Team Region V	
TITLE: Well Sample Locations	FIGURE #: 2-4
SITE: Metro Disposal Systems, Inc.	TDD#: T05-9503-210
CITY: Fairmont City STATE: Illinois	SCALE: Not to scale
SOURCE: Ecology and Environment, Inc.	DATE: 1991 REVISED: 1995



ecology and environment, inc. Technical Assistance Team Region V	
TITLE: Well Location Map	FIGURE #: 2-5
SITE: Metro Disposal Systems, Inc.	TDD#: T05-9503-210
CITY: Fairmont City STATE: Illinois	SCALE: Not to scale
SOURCE: Ecology and Environment, Inc.	DATE: 1091 REVISED: 1995

RESULTS OF CHEMICAL ANALYSIS OF
FIT-COLLECTED MONITORING WELL SAMPLES
FOR THE METRO SITE SSI

Sample Collection Information and Parameters	Sample Number MW1	Duplicate	MW2	MW3	MW4	Blank
Date	5/9/91	5/9/91	5/9/91	5/9/91	5/9/91	5/9/91
Time	1130	1130	1020	1230	1200	1300
Organic Traffic Report Number	EKX66	EHW94	EMN98	EHW91	EHW92	EJW99
Inorganic Traffic Report Number	MELP99	MELT96	MELT91	MELT92	MELT93	MELT97
Temperature (°C)	13	13	14	15	15	18
Specific Conductivity (µmhos)	1,334	1,334	4,520	1,326	799	8.13
pH	6.08	6.08	6.27	6.6	7.09	6.71
Compound Detected (values in µg/L)						
Volatile Organics						
chloroform	--	--	--	--	--	4J
bromodichloromethane	--	--	--	--	--	3J
dibromochloromethane	--	--	--	--	--	2J
benzene	--	--	10	--	--	--
chlorobenzene	--	--	120	--	--	--
Semivolatile Organic†						
Analyte Detected (values in ug/L)						
antimony	45.2B	--	73.4	44.5B	--	--
arsenic	2.4BWJ	--	15.1J	2.2BJ	6.4BJ	--
barium	101B	98.0B	549	235	50.0B	--
beryllium	--	1.3BJ	--	--	--	--
calcium	162,000	157,000	368,000	152,000	80,400	13,400
cobalt	--	5.7B	6.7B	--	--	--
copper	--	6.1BJ	--	--	13.3BJ	7.1BJ
iron	20.8B	--	39,200	5,600	24.4B	--

Sample Collection Information and Parameters	Sample Number MW1	Duplicate	MW2	MW3	MW4	Blank
lead	--	--	1.4B	1.5BW	1.3B	--
magnesium	33,600	31,900	113,000	28,800	27,300	3,810B
manganese	335	323	2,320	1,080	4.8BJ	1.8BJ
nickel	27.7B	22.5B	50.0	--	--	--
potassium	4,920BJ	4,470BJ	30,100J	7,350J	5,250J	13,000
selenium	1.5BNWJ	--	--	--	--	--
sodium	38,000	37,100	199,000	29,800	14,900J	3,710B
vanadium	4.0BJ	--	--	--	--	--
zinc	18.4BJ	22.6J	12.3BJ	15.4BJ	142	6.7B

-- Not detected.

† The semivolatile analysis results for sample MW1 are deemed unusable (R).

RESULTS OF CHEMICAL ANALYSIS OF
FIT-COLLECTED LEACHATE WELL SAMPLES
FOR THE METRO SITE SSI

Sample Collection Information and Parameters	Sample Number LW1	Duplicate	LW2	LW2A†	Blank
Date	5/8/91	5/8/91	5/8/91	5/8/91	5/8/91
Time	1645	1645	1600	1600	1630
CLP Organic Traffic Report Number	EKF57	EHM03	EHM02	EHM02	EHM04
CLP Inorganic Traffic Report Number	MELT98	MEKN02	MELT99	†	MEKN03
Compound Detected (values in µg/L)					
Volatile Organics					
methylene chloride	NR	12,000B	4,100B	1,300D	—
acetone	NR	—	6,400J	2,600BD	—
2-butanone (MEK)	NR	--	3,400	4,100JD	—
1,1,1-trichloroethane	NR	1,200J	--	--	—
benzene	NR	6,500	—	--	—
4-methyl-2-pentanone	NR	--	10,000J	6,600DJ	—
toluene	NR	—	1,800	1,200D	—
chlorobenzene	NR	140,000	—	--	—
Semivolatile Organics	NR	††	††	††	††
Pesticides/PCBs					
Aroclor 1242	130	36	—	—	—
Analyte Detected (values in µg/L)					
aluminum	—	—	14,600		—
antimony	30.2B	—	31.8B		—
arsenic	3.3BWJ	1.2BJ	16.5J		—
barium	469	464	1,220		—
beryllium	--	--	2.1B		—

Sample Collection Information and Parameters	Sample Number LW1	Duplicate	LW2	LW2A†	Blank
calcium	138,000	138,000	138,000		—
chromium	--	--	47.1		—
cobalt	6.3B	5.9B	13.2B		—
copper	—	--	119		23.5BJ
iron	4,230	3,650	67,500		—
lead	4.1	2.3B	108		—
magnesium	69,800	68,300	56,400		—
manganese	183	185	609		—
mercury	--	--	0.53		—
nickel	--	13.0B	74.2		—
potassium	79,100	78,000	65,100		—
silver	--	5.6B	—		—
sodium	253,000	249,000	120,000		102BJ
vandium	--	--	26.5B		—
zinc	7.1BJ	11.7BJ	406		—

† Sample LW2A was analyzed only for organics and pesticides/PCBs.

-- Not detected.

NR Analysis for volatile and semivolatile organics was not performed for samples LW1.

†† The semivolatile analysis results for the duplicate, samples LW2 and LW2A, and the blank are deemed unusable (R).

COMPOUND QUALIFIERS	DEFINITION	INTERPRETATION
J	Indicates an estimated value.	Compound value may be semiquantitative.
B	This flag is used when the compound is found in the associated blank as well as in the sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.	Compound value may be semiquantitative if it is <5x the blank concentration (<10x the blank concentrations for common laboratory artifacts: phthalates, methylene chloride, acetone, toluene, 2-butanone).
D	This flag identifies all compounds identified in an analysis at a secondary dilution factor.	Alerts data user to a possible change in the CRQL. Data is quantitative.
R	Results are unusable due to a major violation of QC protocol.	Compound value is not usable.

ANALYTE QUALIFIERS	DEFINITION	INTERPRETATION
B	Value is real, but is above instrument DL and below CRDL.	Value may be quantitative or semiquantitative.
J	Value is above CRDL and is an estimated value because of a QC protocol.	Value may be semiquantitative.
W	Post-digestion spike for furnace AA analysis is out of control limits (35-115%), while sample absorbance is <50% of spike absorbance.	Value may be semiquantitative.

RESULTS OF CHEMICAL ANALYSIS OF
FIT-COLLECTED SOIL SAMPLES
FOR THE METKO SITE SS1

Sample Collection Information and Parameters	Sample Number S1	S2	S3	S4	S5	S6	S7	S8
Date	5/8/91	5/8/91	5/8/91	5/8/91	5/8/91	5/8/91	5/8/91	5/8/91
Time	1230	1245	1250	1300	1320	1503	1500	1345
CLP Organic Traffic Report Number	ES387	ES388	ES389	ES390	ES391	EHW88	EHW89	EHW90
CLP Inorganic Traffic Report Number	MEHA93	MEHA94	MEHA95	MEHA96	MEHA97	MEHA98	MEHA99	MELP98
Compound Detected (values in ug/kg)								
Volatile Organics								
methylene chloride	--	150J	--	--	--	--	680D	--
acetone	120	52	30	--	230	350	1,100D	--
carbon disulfide	5J	--	3J	--	--	6J	--	4J
2-butanone (MEK)	--	--	--	--	--	--	430D	--
benzene	--	--	--	--	7J	--	--	--
toluene	2J	-	--	--	4J	4J	--	2J
chlorobenzene	--	--	--	--	2,500E	100	--	--
Semivolatile Organics								
fluoranthene	--	--	--	--	--	--	1,200J	--
pyrene	--	--	--	--	--	--	970J	--
Pesticides/PCBs								
Dieldrin	--	--	44	--	--	--	--	--
Analyte Detected (values in mg/kg)								
aluminum	14,000	18,600	10,100	11,500	22,300	15,600	7,650	13,100
arsenic	5.1NJ	8.3NJ	4.5NJ	11.9NsJ	7.1NJ	5.2NJ	5.8NJ	9.2NsJ
barium	159A	591A	193A	223A	403A	323A	333A	241A
beryllium	1.3BJ	1.6BJ	0.63BJ	0.75BJ	1.9BJ	1.1BJ	0.57BJ	1.1BJ
cadmium	2.9J	10.1	4.3	--	14.6	2.9J	6.9	3.3J
calcium	7,340	7,260	4,690	16,400	9,930	34,100	27,300	13,600
chromium	23.5	67.4	25.8	22.0	32.0	27.6	78.2	22.4
cobalt	10.9B	10.6B	6.7B	9.3B	11.4B	7.7B	6.3B	9.9B
copper	21.7	46.5	31.1	22.1	91.2	34.2	54.4	25.2
iron	22,800	36,100	17,900	35,900	31,900	41,000	16,700	21,500
lead	75.7AsJ	125AJ	105AJ	29.5AJ	109AJ	66.4AJ	284AJ	60.1AJ
magnesium	5,360	4,670	3,060	4,910	6,000	5,490	4,490	6,500
manganese	214	381	125	411	479	435	255	605
mercury	--	0.46	0.20	--	--	--	--	--
nickel	26.1	27.4	21.0	28.8	47.7	32.1	21.1	28.8
potassium	2,780	3,470	1,910	2,710	4,210	3,660	1,500B	3,050
selenium	0.37BNWJ	0.74BNWJ	0.30BNWJ	--	0.82BNWJ	0.47BNWJ	0.37BNWJ	--

Sample Collection Information and Parameters	Sample Number S1	S2	S3	S4	S5	S6	S7	S8
Sodium	271B	306B	75.0B	390B	990B	824B	479B	123B
Thallium	--	0.47B	--	--	0.43B	--	--	0.30B
Vanadium	35.4	39.1	23.7	22.3	42.7	31.7	24.7	30.4
Zinc	190	622	333	120	686	288	526	134

-- Not detected.

COMPOUND QUALIFIERS	DEFINITION	INTERPRETATION
J	Indicates an estimated value.	Compound value may be semiquantitative.
E	This flag identifies compounds whose concentrations exceed the calibration range of the GC/MS instrument for that specific analysis. This flag will not apply to pesticides/PCBs analyzed by GC/EC methods.	Compound value may be semiquantitative. There should be another analysis with a D qualifier, which is to to be used.
D	This flag identifies all compounds identified in an analysis at a secondary dilution factor.	Alerts data user to a possible change in the CRDL. Data is quantitative.

ANALYTE QUALIFIERS	DEFINITION	INTERPRETATION
S	Analysis by Method of Standard Additions.	Value is quantitative.
N	Spike recoveries outside QC protocols, which indicates a possible matrix problem. Data may be biased high or low. See spike results and laboratory narrative.	Value may be quantitative or semiquantitative.
*	Duplicate value outside QC protocols which indicates a possible matrix problem.	Value may be quantitative or semiquantitative.
B	Value is real, but is above instrument DL and below CRDL.	Value may be quantitative or semiquantitative.
J	Value is above CRDL and is an estimated value because of a QC protocol.	Value may be semiquantitative.
W	Post-digestion spike for furnace AA analysis is out of control limits (85-115%), while sample absorbance is <50% of spike absorbance.	Value may be semiquantitative.

COMPOUND QUALIFIERS	DEFINITION	INTERPRETATION
J	Indicates an estimated value.	Compound value may be semiquantitative.
R	Results are unusable due to a major violation of QC protocol.	Compound value is not usable.

ANALYTE QUALIFIERS	DEFINITION	INTERPRETATION
N	Spike recoveries outside QC protocols, which indicates a possible matrix problem. Data may be biased high or low. See spike results and laboratory narrative.	Value may be quantitative or semi-quantitative.
B	Value is real, but is above instrument DL and below CRDL.	Value may be quantitative or semi-quantitative.
J	Value is above CRDL and is an estimated value because of a QC protocol.	Value may be semiquantitative.
W	Post-digestion spike for furnace AA analysis is out of control limits (35-115%), while sample absorbance is <50% of spike absorbance.	Value may be semiquantitative.

APPENDIX C

ENDANGERED SPECIES LIST FOR ST. CLAIR COUNTY, ILLINOIS

APPENDIX C

ENDANGERED SPECIES LIST FOR ST. CLAIR COUNTY, ILLINOIS

Latin Name	Species Name	Habitat	Status
Botaurus lentiginosus	American Bittern	freshwater marshes, wetlands	E
Casmerodius albus (Linnaeus)	Great Egret	Floodplain forests	E
Egretta caerulea (Linnaeus)	Little Blue Heron	Wetland forests, marshes	E
Egretta thula (Molina)	Snowy Egret	Lagoons and marshes of the American Bottoms	E
Gallinula chloropus (Linnaeus)	Common Moorhen	Freshwater marshes, lakes, ponds	T
Lanius ludovicianus Linnaeus	Loggerhead Shrike	Agricultural areas, grassland habitat	T
Nycticorax nycticorax (Linnaeus)	Black-crowned Night Heron	Wetland thickets, bottomland forests	E
Podilymbus podiceps Linnaeus	Pied-billed Grebe	Well vegetated lakes, ponds, marshes	E

Key:
E: Endangered Species
T: Threatened Species

APPENDIX D

REFERENCE DOCUMENTATION

ecology and environment, inc.
CHICAGO, ILLINOIS

TELEPHONE LOG

REFERENCE

CONTACT	COMPANY or AGENCY	POSITION
Employee	Mounds Public Water Sys	Receptionist

CONTACT ADDRESS	CONTACT PHONE NUMBER
1 Paul Street Collinsville IL	618 344-9264

E&E EMPLOYEE	DATE	TIME
Alix Rauschman	August 18 1995	10:45 am

PROJECT NUMBER	SITE NAME and LOCATION
ZT3051 EIL0417VAA	Metro Disposal Systems, Inc.

DISCUSSION

The Mound PWS well is located East of Monks Mound w/in the town of State Park just north of Route 40. There are 599 accounts.

SIGNATURE Alix Rauschman

PAGE 1 OF 1

ecology and environment, inc.
CHICAGO, ILLINOIS

TELEPHONE LOG

REFERENCE: Mounds Public water systems receptionist

CONTACT	COMPANY or AGENCY	POSITION
Ron Carsellus	Mounds Public Water Systems	manager

CONTACT ADDRESS	CONTACT PHONE NUMBER
1 Paul St. Collinsville, IL 62234	618-344-9864

E&E EMPLOYEE	DATE	TIME
Alix Rauschman	August 14, 1995	2:30 pm

PROJECT NUMBER	SITE NAME and LOCATION
ZT 3051 E1C018VAA ZT 3051 E1C041TVAA	Thompson Garage Service Metro Disposal Systems, Inc. Fairmont City Illinois

DISCUSSION

The Mounds PWS obtains groundwater for drinking water use. The well is located near to the office. The area is called State Park.

SIGNATURE: Alix Rauschman

ecology and environment, inc.
CHICAGO, ILLINOIS

TELEPHONE LOG

REFERENCE: Metro Report

CONTACT	COMPANY or AGENCY	POSITION
Employee-Receptionist	Mounds Pub. Water Sup.	Receptionist

CONTACT ADDRESS	CONTACT PHONE NUMBER
1 Paul St. Collinsville Il 62234	618-344-9264

E&E EMPLOYEE	DATE	TIME
Alix Daniel	August 10 1995	8pm

PROJECT NUMBER	SITE NAME and LOCATION
E1C018VAA ZT3051 E1C041JVAA	Thomas Garage Fairmont City Metro Disposal Illinois

DISCUSSION

The Mounds PWS serves part of E. St. Louis and the State Park area (Collinsville). They currently have 599 accounts.

They utilize groundwater. She did not know where wells were, and referred me to Ron Carsellus.

SIGNATURE: Alix Daniel

PAGE 1 OF 1

ecology and environment, inc.
CHICAGO, ILLINOIS

TELEPHONE LOG

REFERENCE: Metro-Thor Report

CONTACT	COMPANY or AGENCY	POSITION
Andy Buck	Ill. St. Water Survey	Geologist

CONTACT ADDRESS	CONTACT PHONE NUMBER
Springfield, Ill.	217-333-2210

E&E EMPLOYEE	DATE	TIME
Ally Rauschman	August 10, 1995	1000 cm

PROJECT NUMBER: ZT3051 EIL 0181 0aa EIL 0417 0aa

SITE NAME AND LOCATION: Metro Disposal Sytems garage Fairmont City, Illinois

DISCUSSION

East St. Louis obtains drinking water from the Illinois-America Water Co. The intakes where the water Co. obtains its water are from the Mississippi River. The locations of those intakes are: Township 2N 10W Sec. 11A and Township 4N 10W Sec. 28.8A.

Woodriver has 6 wells from which they obtain drinking water. Wells 3, 4, 6 are @ 5N 9W Sec. 28 7E. Wells 1, 2, 5 are @ 5N 9W Sec. 28.8E. Woodriver is its own municipality.

Fairmont City also obtains drinking water from the ILL-Amer Water Co.

Pop of W.R. = 18840 and in 1993, they pumped 4083 m gal/yr. pumpage for people of Woodriver

SIGNATURE: Alex Lea Rausch

ecology and environment, inc.
CHICAGO, ILLINOIS

TELEPHONE LOG

REFERENCE: Metro Report, Thomas Report

CONTACT	COMPANY or AGENCY	POSITION
Connie	IEPA Pub. Water Div	

CONTACT ADDRESS	CONTACT PHONE NUMBER
Springfield Ill.	217-782-1704

E&E EMPLOYEE	DATE	TIME
Alix Rausch	August 10 1995	4pm

PROJECT NUMBER	SITE
ZT3051 EILO181VAA EILO477VAA	Metro Disposal Systems Service Fairmont City, Ill

DISCUSSION

E. St. Louis, Belleville, and Fairmont City all receive water from the Ill-Amer. Water Co. ≈ approx 139,000 persons.

Wood River has a pop of 10240

Mound PWS = Own community

SIGNATURE: Alix Jean Rausch

PAGE 1 OF 1

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TELEPHONE LOG

REFERENCE: Thomas Garage Ref

CONTACT	COMPANY or AGENCY	POSITION
Robert Allen Jr.	Thomas Garage Service	Son & owner

CONTACT ADDRESS	CONTACT PHONE NUMBER
3619 Collinsville Rd, Fairmont City, IL	217 -

E&E EMPLOYEE	DATE	TIME
Alex Randal	August 10 1995	3:40 pm

PROJECT NUMBER	SITE NAME and LOCATION
23051 ELW0187aa	Thomas Garage Service Fairmont City Illinois

DISCUSSION

The Thomas Garage site was never a landfill. In the 1980's, the site area was excavated and construction fill was filled in along the road.

The site currently has 3 USTS. There two "observation ports" for the USTs on-site. The USTs have been there since 1987 (approx) The USTs have vapor control systems.

R. Allen Jr. has worked @ Thomas Garage for ≈ 30 yrs.

SIGNATURE: Alex Randal

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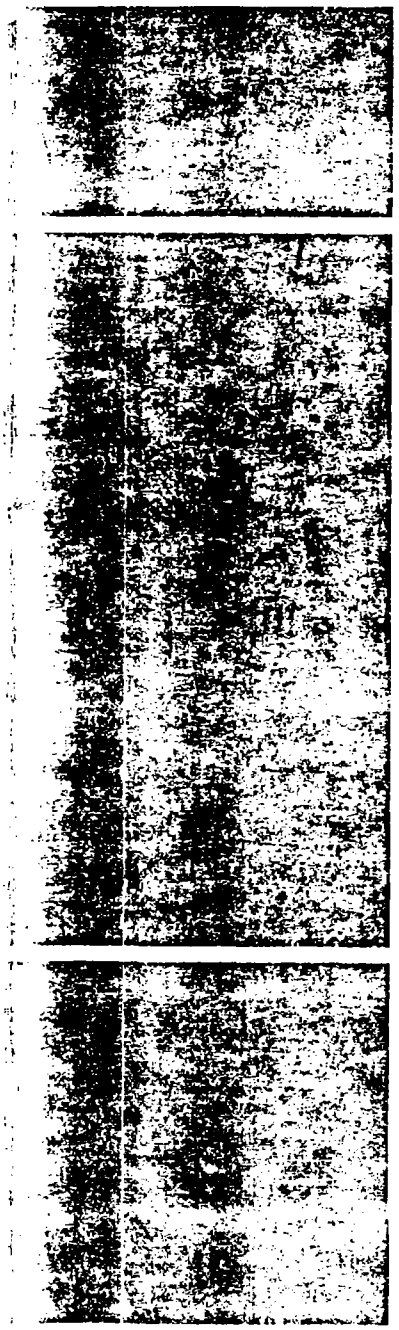

ecology and environment, inc.

International Specialists in the Environment

Job Number ZT3051

SITE NAME: Multiple

TDD #: Multiple

PAN #: Multiple

SSID #:

Book 1 OF 1

Date

SITE NAME: Metro Disposal.

TIME 11:56

The Site is littered with municipal waste and demo debris. The Soil is discolored, dark black, paint sludges and paint containers were observed. Nearest residence is located ~ 500 - 700 west of the Site along Collinsville Rd. The Site is littered with old tires. Spray paint cans also present, oily spots scattered around the Site. Asbestos containing material were also observed.

FRAMES # 1 - 5

* The Site is not fenced and no security measures were present at the Site.

* NO Sign of monitoring wells at all.

* The Site is receiving municipal and industrial waste as we speak.

* STRESS vegetation is apparent at the Site.

* Burning area of old tires and sludge waste is present on the Southwest end of the Site.

* No Surface run off control measures

* Surface run off generally towards the west but East of the Site.

* Nearby wetland is flooded with rain water. Waste is sloughing

U.S. EPA REGULATORY ACTIONS

Substance Name: Chlorobenzene
CASRN: 108-90-7
Primary Synonym: Monochlorobenzene

EPA risk assessments may be updated as new data are published and as assessment methodologies evolve. Regulatory actions are frequently not updated at the same time. Compare the dates for the regulatory actions in this section with the verification dates for the risk assessments in the Oral RfD, Inhalation RfC and Carcinogen Assessment Sections, as this may explain inconsistencies. Also note that some regulatory actions consider factors not related to health risk, such as technical or economic feasibility. Such considerations are indicated for each action. In addition, not all of the regulatory actions listed in this section involve enforceable federal standards. Please direct any questions you may have concerning these regulatory actions to the U.S. EPA contact listed for that particular action. Users are strongly urged to read the background information on each regulatory action in the Regulatory Action Background Document.

SAFE DRINKING WATER ACT (SDWA)

Maximum Contaminant Level Goal

Value: 0.1 mg/L
Status/Year: Final 1991
Econ/Tech?: No, does not consider economic or technical feasibility
Reference: 56 FR 3526 (01/30/91)

Contact: Health and Ecological Criteria Division / (202)260-7571
Safe Drinking Water Hotline / (800)426-4791

Discussion: A MCLG of 0.1 mg/L is promulgated based on potential adverse effects (hepatic toxicity) reported in a subchronic study of dogs. The MCLG is based upon a DWEL of 0.7 mg/L and an assumed drinking water contribution of 20 percent.

Maximum Contaminant Level (MCL)

Value: 0.1 mg/L
Status/Year: Final 1991
Econ/Tech?: Yes, does consider economic or technical feasibility
Reference: 56 FR 3526 (01/30/91); 56 FR 30266 (07/01/91)

Contact: Drinking Water Standards Division / OGWDW / (202)260-7575
Safe Drinking Water Hotline / (800)426-4791

Discussion: EPA has promulgated a MCL equal to the MCLG of 0.1 mg/L.

Monitoring Requirements

All systems initially monitored for four consecutive quarters; repeat monitoring dependent upon detection, vulnerability status and system size.

U.S. EPA REGULATORY ACTIONS

Analytical Methods

Capillary column gas chromatography/mass spectrometry (EPA 524.2). PQL= 0.005 mg/L.

Best Available Technology

Granular activated carbon; packed tower aeration.

Required Monitoring of "Unregulated" Contaminants (RMUC)

Status/Year: Listed 1991 Final
Econ/Tech?: No, does not consider economic or technical feasibility
Reference: 56 FR 25690 (07/08/87)

Contact: Drinking Water Standards Division / OGWDW / (202)260-7575

Contact: Safe Drinking Water Hotline / (800)426-4791

Discussion: 'Unregulated' contaminants are those contaminants for which EPA establishes a monitoring requirement but which do not have an associated final MCLG, MCL, or treatment technique. EPA may regulate these contaminants in the future.

Monitoring Requirements

Monitoring required for all water systems at a minimum frequency of once every 5 years.

Analytical Methods

Gas chromatography (EPA 502.1, 502.2, 503.1); gas chromatographic/mass spectrometry (EPA 524.1, 524.2).

CLEAN WATER ACT (CWA)

Ambient Water Quality Criteria for Human Health

Water & Fish: 4.88E+0 ug/liter
Fish Only: None
Econ/Tech?: No, does not consider economic or technical feasibility
Reference: FR 79318 (11/28/80)

Contact: Criteria and Standards Division / OWRS / (202)260-1315

Discussion: To control undesirable taste and odor qualities of ambient water, the estimated concentration is 2.0E+1 ug/L. There is no demonstrated relationship between organoleptic endpoints and adverse health effects.

U.S. EPA REGULATORY ACTIONS

Ambient Water Quality Criteria for Aquatic Organisims

	Acute	Chronic
Freshwater:	2.5E+2 ug/L LEC	5.0E+1 ug/L LEC
Marine:	1.6E+2 ug/L LEC	1.29E+2 ug/L LEC
Econ/Tech?:	No, does not consider economic or technical feasibility	
Reference:	45 FR 79318 (11/28/80)	

Contact: Criteria and Standards Division / OWRS / (202)260-1315

Discussion: The values that are indicated as "LEC" are not criteria, but are the lowest effect levels found in the literature. LECs are given when the minimum data required to derive water quality criteria are not available. The criteria are based on chlorinated benzenes as a class.

RESOURCE CONSERVATION AND RECOVERY ACT (RCRA)

Appendix IX Listing for Land Disposal

Status: Listed 1987

Reference: 52 FR 25942 (07/09/87)

Contact: RCRA/Superfund Hotline / (800)424-9346 / (202)260-3000

SUPERFUND (CERCLA)

Reportable Quantity for Accidental Release

Value:	100 pounds
Status/Year:	Final 1989
Econ/Tech?:	No, does not consider economic or technical feasibility
Reference:	54 FR 33418 (08/14/89)

Contact: RCRA/Superfund Hotline / (800)424-9346 / (202)260-3000

Discussion: The final RQ for chlorobenzene is based on aquatic toxicity as established under CWA Section 311 (40 CFR 117.3). The available data indicate that the aquatic 96-Hour Median Threshold Limit is 1-10 ppm, which corresponds to an RQ of 100 pounds.

REVISION HISTORY

01/92 Reg Data: Regulatory actions on-line